

REMARKS/ARGUMENTS

Claims 1-30 are pending in the present application.

This response is to respond the non-final Office Action mailed May 12, 2010. In the Office Action, the Examiner rejected claims 11-20 under 35 U.S.C. §101; and claims 1-30 under 35 U.S.C. §103(a). Applicant has amended claims 1, 4, 8, 11, 14, 18, 21, 24, and 28. Reconsideration in light of the amendments and remarks made herein is respectfully requested.

Rejection Under 35 U.S.C. § 101

1. Claims 11-20:

In the Office Action, the Examiner rejected claims 11-20 under 35 U.S.C. §101 as not falling within one of the four statutory categories of invention. The Examiner contends that the instant claims are neither positively tied to a particular machine that accomplishes the claimed method steps nor transform underlying subject matter, and therefore do not qualify as a statutory process (Office Action, page 2, paragraph 3). Applicant respectfully traverses the rejection for the following reasons.

Applicant submits that the claims are statutory and satisfy the requirements in the *Bilski* test.

The independent claim 11 recites: "A method comprising: encoding data in a first format from an input device into a string of data having a second format supported by a server having an instant message infrastructure, the first and second formats being different; breaking the string of data into packets no larger than maximum message size allowed by the infrastructure, the packets having at least one packet having a header, the header identifying the first format; and decoding a received packet encoded in the second format back into the data having the first format."

A claimed process is statutory if it is limited to a practical application of the abstract idea or mathematical algorithm in the technological arts. See *Alappat*, 33 F.3d at 1543, 31 USPQ2d at 1556-57 (quoting *Diamond v. Diehr*, 450 U.S. at 192, 209 USPQ at 10). See also *Alappat* 33 F.3d at 1569, 31 USPQ2d at 1578-79 (Newman, J., concurring) ("unpatentability of the principle does not defeat patentability of its practical applications") (citing *O'Reilly v. Morse*, 56 U.S. (15 How.) at 114-19).

According to the *Interim Bilski Guidance* provided by Robert Bahr, Acting Associate Commissioner for Patent Examination Policy, dated July 27, 2010, the machine-or-transformation test remains an investigative tool and is a useful starting point for determining whether a claimed invention is a patent-eligible process under 35 U.S.C. 101.

In its *en banc* majority opinion in *In re Bilski*, the U.S Court of Appeals for the Federal Circuit concludes that the “useful, concrete and tangible result” inquiry is inadequate and reaffirms that the machine-or-transformation test outlined by the Supreme Court is the proper test to apply. *In re Bilski*, 545 F.3d 943, 88 U.S.P.Q.2d 1385 (2008). Under the principles discussed in the *Bilski* decision, Applicant believes that claims 11-20 satisfy the machine-or-transformation test and are therefore statutory under 35 U.S.C. §101.

At the onset, the *Bilski* court emphatically states that “the proper inquiry under §101 is not whether the process claims recites sufficient ‘physical steps,’ but rather whether the claim meets the machine-or-transformation test.” Accordingly, “a claim that purportedly lacks any ‘physical steps’ but is still tied to a machine or achieves an eligible transformation passes muster under §101.” *In re Bilski*, 545 F.3d 943, 88 U.S.P.Q.2d 1385 (2008). The *Bilski* court focuses the analysis under the principle articulated by the Supreme Court that whether the claim recites a fundamental principle and if so, whether it would pre-empt substantially all uses of that fundamental principle if allowed. *Gottschalk v. Benson*, 409 U.S. 63, 71-72 (1972).

The *Bilski* court articulates the machine-or-transformation test as a two-branched inquiry. The *Bilski* court states that an applicant may show that a process claim satisfies §101 either by showing that his claim is tied to a particular machine, or by showing that his claim transforms an article, citing *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). Applicant submits that claims 11-20 satisfy both tests as analyzed below.

a) Tying to a particular machine or apparatus:

In *Bilski*, the issues specific to the machine implementation part of the test are not before the court for review. The *Bilski* court therefore leaves to future cases the elaboration of the precise contours of machine implementation. However, there are a number of cases that have been decided by the court that provide clear guidelines in determining whether a claim is tied to a particular machine.

In *In re Abele*, when interpreting an earlier case, *In re Walter*, the court states that “Walter should be read as requiring no more than that the algorithm be ‘applied in any manner to physical elements or process steps,’ provided that its application is circumscribed by more than a field of use limitation or non-essential post-solution activity. *In re Abele and Marshall*, 684 F.2d (CCPA 1982), 214 USPQ 682, 686 (CCPA 1982). The *Abele* court further states that if the claimed invention is an application of the algorithm, §101 will not bar the grant of a patent. *In re Abele*, 684 F.2d (CCPA 1982), 214 USPQ at 687 (CCPA 1982).

Accordingly, “tying to a particular machine” does not require that the process has to be performed by a machine. Rather, “tying to a particular machine” merely requires that the process is applied to a particular machine or apparatus, or a physical object.

An analysis of claim 11 shows that the process is applied a particular apparatus, satisfying the “tying to a particular apparatus” inquiry.

The first element of the claim recites, among other things, “encoding data in a first format from an input device into a string of data having a second format supported by a server having an instant message infrastructure.” An input device, a server, and an infrastructure are all physical objects and concrete entities. The operation is tied to these physical objects and therefore to a machine or particular apparatus. For example, encoding data in a first format from an input device ties the encoding operation to the input device. In addition, the second format is supported by a server, also a machine or apparatus. As claimed, it is clear that this element is tied to a particular machine, namely an input device, a server, and/or an infrastructure.

The second element of the claim recites “breaking the string of data into packets no larger than maximum message size allowed by the infrastructure, the packets having at least one packet having a header, the header identifying the first format.” Packets and a packet having a header represent physical objects, tied to a communication device for data transmission. Accordingly, as above, the second element is also tied to a particular machine, namely packets and infrastructure of a server.

The third element of the claim recites “decoding a received packet encoded in the second format back into the data having the first format.” The received packet represents a physical object. In addition, the second format is supported by a server having an infrastructure also represent a machine or a particular apparatus. The operation decoding therefore is tied to a

physical object and a particular machine or apparatus. Accordingly, as above, the third element is also tied to a particular machine, namely a received packet and infrastructure of a server.

In summary, since all the elements of the claim apply a process operation to physical entities involving a server, which is a particular apparatus, they are all tied to a particular machine or apparatus.

b) Transformation of an article:

In addition to tying to a particular machine or apparatus, the rejected claims also transform an article.

There are three transformations in the rejected claims. The rejected claims transform: (1) data in a first format into a string of data having a second format, (2) the string of data into packets, and (3) a received packet encoded in the second format back into the data having the first format. The data and/or packets are clearly an article, because they represent part of messages in a communication system.

The *Bilski* court is very clear about what it means by “article” in transforming an article. The *Bilski* court states that “[s]o long as the claimed process is limited to a practical application of a fundamental principle to transform specific data, and the claim is limited to a visual depiction that represents specific physical objects or substances, there is no danger that the scope of the claim would wholly pre-empt all uses of the principle.” *In re Bilski*, 545 F.3d 943, 88 U.S.P.Q.2d 1385 (2008).

In discussing *Abele*, the *Bilski* court states that “the claim was not required to involve any transformation of the underlying physical object that the data represented.” *In re Bilski*, 545 F.3d 943, 88 U.S.P.Q.2d 1385 (2008). In other words, as long as a data represents a physical object, transformation of this data is sufficient to satisfy the transformation test. In *Abele*, the data represents the X-ray attenuation data produced in a two-dimensional field by a computed tomography scanner. The *Bilski* court states that this data clearly represents physical and tangible objects, namely the structure of bones, organs, and other body tissues. Here, the process operations operate on data and/or packets representing physical objects.

In summary, the rejected claims satisfy not only one, but both the machine and transformation tests as articulated by the Supreme Court and the Court of Appeals for the Federal

Circuit. Furthermore, the scope of the claim in the principles of retirement administration is such that there is no danger that it would wholly pre-empt all uses of the principle.

2. Claims 21-30:

The Examiner contends that the language “such as data storage devices or from the network” is broad enough and may include both transitory and non-transitory media. Applicant respectfully disagrees. It is well known that data storage devices or network store data. By virtue of storing data, the media are non-transitory. However, in the interest of expediting prosecution of the application, Applicant has amended claim 21.

Accordingly, Applicant respectfully requests the rejections under 35 U.S.C. §101 be withdrawn.

Rejection Under 35 U.S.C. § 103

In the Office Action, the Examiner rejected claims 1-7, 10-17, 20-27, and 30 under 35 U.S.C. §103(a) as being unpatentable over U.S. Publication No. 2009/0164595 A1 issued to Shiigi (“Shiigi”) in view of U.S. Patent No. 6,701,493 B1 issued to Mathews et al. (“Mathews”); and claims 8-9, 18-19, and 28-29 are rejected under 35 U.S.C. §103(a) as being unpatentable over Shiigi in view of Mathews and further in view of U.S. Publication No. 2001/00539978 issued to Lewis et al. (“Lewis”). Applicant respectfully traverses the rejection and submits that the Examiner has not met the burden of establishing a *prima facie* case of obviousness.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *MPEP §2143, p. 2100-126 to 2100-130 (8th Ed., Rev. 5, August 2006)*. Applicant respectfully submits that there is no suggestion or motivation to combine their teachings, and thus no *prima facie* case of obviousness has been established.

Furthermore, the Supreme Court in *Graham v. John Deere*, 383 U.S. 1, 148 USPQ 459 (1966), stated: “Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of

ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined.” MPEP 2141. In *KSR International Co. vs. Teleflex, Inc.*, 127 S.Ct. 1727 (2007) (Kennedy, J.), the Court explained that “[o]ften, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” The Court further required that an explicit analysis for this reason must be made. “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR 127 S.Ct.* at 1741, quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). In the instant case, Applicant respectfully submits that there are significant differences between the cited references and the claimed invention and there is no apparent reason to combine the known elements in the manner as claimed, and thus no *prima facie* case of obviousness has been established.

1. Claims 1-7, 10-17, 20-27, and 30:

Shiigi discloses a method and system for creating and sending handwritten or handdrawn messages via mobile devices. The handwritten message is composed by the user in a graphical data capture area set up by the drawing editor, selecting the appropriate writing and drawing tools, colors, and styles as offered in the Handwriting Java Client software (Shiigi, paragraph [0031], lines 13-14, item 3). When the user issues a “Send” command, the Handwriting Java Client formats the message and sends the pixel data to the Handwriting Java Server. The graphical message is still in GIF format at this time (Shiigi, paragraph [0031], lines 23-26, item 5). The Handwriting Java Server processes the graphical message data using standard base64 encoding. This turns the data into ASCII text that can be transmitted as standard email data packets by the Handwriting Java Server (Shiigi, paragraph [0031], lines 27-30, item 6). The Handwriting Java Server creates an outgoing email message that contains the encoded handwritten message as a GIF attachment (Shiigi, paragraph [0031], lines 31-33, item 7). The Handwriting Java Server decodes the attached GIF file into pixel data and sends it to the

Handwriting Java Client applet running in the recipient's web browser (Shiigi, paragraph [0031], lines 55-57, item 11b).

Mathews discloses multiple source recording. A system accepts different types of signals from multiple sources and routes the signals to the appropriate devices for conversion or other processing so that each signal is in a common or desired format, such as the MPEG standard (Mathews, Abstract). Once all the selected analog and digital signals are in the same digital format, e.g., MPEG encoded, and are ready to be transmitted, packetizer 150 processes each signal stream into packets for identification and later retrieval. For example, each signal stream could include a header having identifying information such as the original source and format (e.g., type, resolution, aspect ratio) of the signal, audio content, and time (Mathews, col. 4, lines 46-53).

Shiigi and Mathews, taken alone or in any combination, do not disclose or render obvious, at least one of: (1) an encoder to encode data in a first format from an input device into a string of data having a second format supported by a server having an instant message infrastructure, the first and second formats being different; and (2) a packetizer coupled to the encoder to break the string of data into packets no larger than maximum message size allowed by the infrastructure, the packets having at least one packet having a header, the header identifying the first format; and (3) a decoder to decode a received packet encoded in the second format back into the data having the first format.

First, Shiigi merely discloses attaching the graphical message as a GIF attachment (Shiigi, paragraph [0031], items 5 and 6), NOT an encoder to encode data in a first format from an input device into a string of data having a second format supported by a server having an infrastructure, the first and second formats being different. In the Office Action, the Examiner contends that the handwritten data is then encoded into an ASCII text format and this is the second format (Office Action, page 9, lines 1-4). Applicant respectfully disagrees. The pixel data representing the drawing remains as the GIF format. The data that are converted into the ASCII are merely data in the e-mail, not the graphical data representing the drawing. For ease of reference, the relevant excerpts are copied below.

“5. When the user issues a "Send" command, the Handwriting Java Client formats the message and sends the pixel data to the

Handwriting Java Server. The graphical message is still in GIF format at this time.

6. The Handwriting Java Server processes the graphical message data using standard base64 encoding. This turns the data into ASCII text that can be transmitted as standard email data packets by the Handwriting Java Server.

7. The Handwriting Java Server creates an outgoing email message that contains the encoded handwritten message as a GIF attachment.

8. The Handwriting Java Server sends the outgoing email message with GIF attachment via the SMTP (Simple Mail Transfer Protocol) gateway 240.” (Shiigi, paragraph [0031], items 5-8. *Emphasis added.*)

As seen from the above excerpt, Shiigi merely discloses “turn[ing] the data into ASCII text that can be transmitted as standard email data packets,” (emphasis added) NOT the graphical data representing the drawing. This is because if the graphical data is converted into ASCII text, there would be no need to send the graphical data as GIF attachment. The fact that the graphical data is sent as GIF attachment indicates that the graphical data are NOT converted into ASCII.

Second, Shiigi merely discloses creating an outgoing email message that contains the encoded handwritten message as a GIF attachment (Shiigi, paragraph [0031], lines 31-33, item 7), NOT a packetizer coupled to the encoder to break the string of data into packets no larger than maximum message size allowed by the infrastructure, the packets having at least one packet having a header, the header identifying the first format. Attaching a GIF file to an email message does not break the string of data into packets. The GIF file remains intact because it is an attachment and not a part integral to the email message.

In the Office Action, the Examiner contends that emails sent across a network are sent as packets and because the emails are sent successfully (no errors) to the recipient, the messages meet the proper message size (Office Action, page 9, paragraph (b)). Applicant respectfully disagrees. The fact that an e-mail message is sent successfully does not mean that the packets have a maximum size allowed by the infrastructure. An infrastructure, such as the instant message infrastructure, has a different requirement than the e-mail message. To clarify this aspect of the invention, claims 1, 11, and 21 has been amended.

Third, Shiigi merely discloses decoding the attached GIF file into pixel data (Shiigi, paragraph [0031], lines 55-57, item 11b), NOT a decoder to decode a received packet encoded in the second format back into the data having the first format. Decoding the GIF file into pixel data merely decompiles a file into pixel components. It does not convert the second format into the first format.

In the Office Action, the Examiner contends that Shiigi teaches the receiving server or client decoding the ASCII text (second format) data back into the pixel data as a handwritten or hand-drawn image (first format), citing paragraphs [0031], parts 11b, 11c, and [0037]. Applicant respectfully disagrees and submits that the cited excerpts do not support the Examiner's argument. For ease of reference, the cited excerpts are copied below.

"11b. The Handwriting Java Server *decodes the attached GIF file into pixel data* and sends it to the Handwriting Java Client applet running in the recipient's web browser.

11c. The Handwriting Java Client *receives the pixel data from the Handwriting Java Server and renders the pixel data as a handwritten or handdrawn image in the drawing editor/viewer.*" (Shiigi, paragraph [0031], items 11b and 11c. *Emphasis added.*)

"With reference to FIG. 6, this version of the system uses the Handwriting Java Client along with a standard Internet email mail server providing email service to wireless client computers, such as WAP-phones and PDAs. As before, the Handwriting Java Client 610a operates in a web browser as an installed Java applet on the client computer 610. *The email message is formatted with the handwritten image converted into an attached GIF file.* The Java applet 610a communicates with the Mail Server computer 640 either directly or through an SMTP gateway computer 620. The Mail Server 640 includes a Wireless Application Protocol (WAP) interface which sends the email message with encapsulated GIF image through a Wireless Service Provider having WAP handling capability to the recipient. (Shiigi, paragraph [0037]. *Emphasis added.*)

As seen from the above, Shiigi merely discloses decoding the attached GIF file into pixel data and rendering the pixel data in the drawing editor/viewer (Shiigi, paragraph [0031], items 11b and 11c), NOT decoding the ASCII text into the pixel data. In fact, this excerpt reinforces Applicant's earlier argument that the pixel data are NOT converted into the ASCII text.

2. Claims 8-9, 18-19, and 28-29:

Shiigi and Mathews are discussed above

Lewis discloses a system and method for providing user-directed constraints for handwriting recognition. A user selects between a "default recognition" mode and a "constrained recognition" mode via a user interface. In the default recognition mode, a recognition engine utilizes predetermined default recognition parameters to decode data (e.g., handwriting and speech). In the constrained recognition mode, the user can select one or more of a plurality of recognition constraints which temporarily modify the default recognition parameters to decode uncharacteristic and/or special data (Lewis, Abstract).

Shiigi, Mathews, and Lewis, taken alone or in any combination, do not disclose or render obvious, at least one of: (1) an encoder to encode data in a first format from an input device into a string of data having a second format supported by a server having an instant message infrastructure, the first and second formats being different; (2) a packetizer coupled to the encoder to break the string of data into packets no larger than maximum message size allowed by the infrastructure, the packets having at least one packet having a header, the header identifying the first format; and (3) a management layer coupled to the packetizer to process the packetized string of data using a processing function, the processing function being enabled or disabled using a configuration user interface

As discussed in the 35 U.S.C. §103(a) rejection for claims 1-7, 10-17, 20-27, and 30 above, Shiigi does not disclose or render obvious elements (1) and (2) as above. To clarify an aspect of the invention, claims 8, 18, and 28 have been amended. Accordingly, a combination of Shiigi with any other references in rejecting claims 8, 18, and 28 which include elements (1) and (2), is improper.

Furthermore, Lewis merely discloses a user to select between a default recognition and a constrained recognition, not a processing function being enabled or disabled using a configuration user interface. A user is not a processing function. Selecting between the two types of recognition is not the same as enabling or disabling the processing function. Selecting allows the user to choose one of the recognition types. It does not allow the user to enable or disable a processing function.

The Examiner failed to establish a prima facie case of obviousness and failed to show there is teaching, suggestion, or motivation to combine the references. When applying 35 U.S.C. 103, the following tenets of patent law must be adhered to: (A) The claimed invention must be considered as a whole; (B) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination; (C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and (D) Reasonable expectation of success is the standard with which obviousness is determined. *Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986). "When determining the patentability of a claimed invention which combined two known elements, 'the question is whether there is something in the prior art as a whole suggest the desirability, and thus the obviousness, of making the combination.'" *In re Beattie*, 974 F.2d 1309, 1312 (Fed. Cir. 1992), 24 USPQ2d 1040; *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1462, 221 USPQ (BNA) 481, 488 (Fed. Cir. 1984). To defeat patentability based on obviousness, the suggestion to make the new product having the claimed characteristics must come from the prior art, not from the hindsight knowledge of the invention. *Interconnect Planning Corp. v. Feil*, 744 F.2d 1132, 1143, 227 USPQ (BNA) 543, 551 (Fed. Cir. 1985). To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the Examiner to show a motivation to combine the references that create the case of obviousness. In other words, the Examiner must show reasons that a skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the prior elements from the cited prior references for combination in the manner claimed. *In re Rouffet*, 149 F.3d 1350 (Fed. Cir. 1996), 47 USPQ 2d (BNA) 1453. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or implicitly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973. (Bd.Pat.App.&Inter. 1985). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Furthermore, although a prior art device "may be capable of

being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so.” *In re Mills*, 916 F.2d at 682, 16 USPQ2d at 1432; *In re Fritch*, 972 F.2d 1260 (Fed. Cir. 1992), 23 USPQ2d 1780.

Moreover, the Examiner failed to establish the factual inquires in the three-pronged test as required by the *Graham* factual inquires. There are significant differences between the cited references and the claimed invention as discussed above. Furthermore, the Examiner has not made an explicit analysis on the apparent reason to combine the known elements in the fashion in the claimed invention. Accordingly, there is no apparent reason to combine the teachings of Shiigi, Mathews, and Lewis in any combination.

In the present invention, the cited references do not expressly or implicitly disclose any of the above elements. In addition, the Examiner failed to present a convincing line of reasoning as to why a combination of Shiigi, Mathews, and Lewis is an obvious application of transmitting new data format under existing infrastructure, or an explicit analysis on the apparent reason to combine Shiigi, Mathews, and Lewis in the manner as claimed.

Therefore, Applicant believes that independent claims 1, 8, 11, 18, 21, 28 and their respective dependent claims are distinguishable over the cited prior art references. Accordingly, Applicant respectfully requests the rejection under 35 U.S.C. §103(a) be withdrawn.

Conclusion

Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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Dated: August 12, 2010

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